DOCUMENT RESUME

ED 452 393 CE 081 662

AUTHOR Wilkinson, Kelly S., Ed.
TITLE A Career Odyssey. Proceedings of the Annual Meeting of the Association for Career and Technical Education/International Vocational Education and Training Association (74th, San Diego, California, December 7-10, 2000). Business Education Division.
PUB DATE 2000-12-00
NOTE 64p.
PUB TYPE Collected Works - Proceedings (021)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Academic Advising; *Business Education; Business Education Teachers; Computer Literacy; *Computer Mediated Communication; Educational Research; Engineering Education; Engineers; Field Experience Programs; Full Time Faculty; Group Dynamics; *Grouping (Instructional Purposes); Higher Education; Keyboarding (Data Entry); Marketing; *Multicultural Education; Online Systems; Part Time Faculty; Preservice Teacher Education; Preservice Teachers; Teacher Attitudes; *Teaching Experience
IDENTIFIERS Contextualized Instruction

ABSTRACT

These six papers present sound research in business education. "Status of Full- and Part-Time Business Faculty at Two-Year College and Perceived Importance of Selected Professional Services" (Marcia A. Anderson, Sharon Resch) reports full-time faculty received more professional services, and part-time faculty valued professional services differently. "Engineering Professionals: Their Need for Computer Keyboarding Competency" (Deborah K. Ryker, Marcia Anderson) finds over three-fourths of university engineering graduates indicated computer keyboarding skills were not a prerequisite for their work position; most found computer keyboarding skills improved their work productivity substantially or some; and the majority felt these skills should be required. "Early Field Experience: One Approach to Contextual Teaching and Learning" (Wanda L. Stitt-Gohdes) reports research that supports inclusion of extensive early field experiences in business education preservice programs because they provide a context where students observe the extent to which current teachers make a connection between school- and work-based learning. "Issues of Multicultural Education: Attitudes of Business and Marketing Education Teachers" (Elaine Adams, Helen C. Hall) indicates teachers tended to reflect positive attitudes about the multicultural issues raised. "Advising Challenging in Cyberspace" (Barbara Pevoto) recommends providing students with an advising model geared to online instruction at the university level. "The Effect of Different Methods of Forming Groups on Student Performance in a Business Communication Course" (Michael L. McDonald, Cheryl D. Wiedmaier) finds no statistically significant difference in student performance when groups were formulated by the student participants or by the instructor based on differences in participants' declared majors. (YLB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 452 393

BUSINESS EDUCATION 2000
ACTE ANNUAL CONVENTION

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
K. Wilkinson
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

A Career Odyssey

Edited by Kelly S. Wilkinson
University of Missouri-Columbia

December 6-10, 2000
Hyatt Regency
San Diego, California

BEST COPY AVAILABLE

CE081662

FOREWORD

The following pages contain some of the papers for the Annual ACTE Conference held in San Diego, December 6-10, 2000. The conference theme this year, A Career Odyssey, reflects the diverse papers submitted this year.

Papers for the business division research session were submitted to a blind referee process. Eight papers were accepted for presentation at the research session with six published in the proceedings.

These proceedings are a continued effort to encourage sound research in business education that will influence and enhance our own odyssey in the profession.

I want to thank my research assistant Sothana Srichai for her help in preparing the proceedings. I also want to thank the reviewers for all of their work.

Kelly S. Wilkinson
Editor, Proceedings for the 2000 ACTE Conference

National Association of Teacher Educators
For Business Education

Nancy Zeliff, President
Northwest Missouri State University

Douglas Smith, President-elect
University of Kentucky

Donna Redmann, Secretary
Louisiana State University

Betty Brown, Treasurer
Ball State University

Marcia Anderson, Past President
Southern Illinois University Carbondale

Cheryl Wiedmaier, Newsletter Editor
University of South Carolina

Executive Board

Wanda Stitt-Gohdes
The University of Georgia

Roger Luft
Eastern Illinois University

Michael McDonald
The University of Southern Mississippi

Other NATEBE Appointments

Don Bright
Bowling Green State University

Elinor Brown
University of Kentucky

Margaret Erthal
University of Southern Illinois

Virginia Hemby
Indiana University of Pennsylvania

Mary Margaret Hosler
University of Wisconsin-Whitewater

Kelly Wilkinson
University of Missouri-Columbia

Dawn Woodland
Indiana University of Pennsylvania

TABLE OF CONTENTS

Status of Full – and – Part-Time Business Faculty at Two-Year College and Perceived Importance of Selected Professional Services.
Dr. Marcia A. Anderson, Southern Illinois University
Dr. Sharon Resch, Shawnee Community College 1

Engineering Professionals: Their Need for Computer Keyboarding Competency.
Ms. Deborah K. Ryker, Benton High School
Dr. Marcia Anderson, Southern Illinois University 13

Early Field Experience: One Approach to Contextual Teaching and Learning.
Dr. Wanda L. Stitt-Gohdes, The University of Georgia 24

Issues of Multicultural Education: Attitudes of Business and Marketing Education Teachers.
Elaine Adams & Helen C. Hall, The University of Georgia 32

Advising Challenging in Cyberspace
Dr. Barbara Pevoto, Southwest Texas State University 44

The Effect of Different Methods of Forming Groups on Student Performance In a Business Communication Course.
Michael L. McDonald, Ph.D. , The University of Southern Mississippi
Cheryl D. Wiedmaier, Ph.D., University of South Carolina 50

Status of Full- and Part-Time Business Faculty at Two-Year College and Perceived Importance of Selected Professional Services

Dr. Marcia A. Anderson
Southern Illinois University

Dr. Sharon Resch
Shawnee Community College

Abstract

This research involved a national study of 750 full- and part-time business faculty at 375 two-year colleges with 483 (65.5%) respondents. Sixty-one percent were over 46 years of age; 83.6% had a M.S. or above; a third were continuing their education, held public school certification, and had K-12 public school teaching experience. Thirty-eight percent of part-time faculty indicated receiving some fringe benefits. Approximately 60% of part-time faculty indicated satisfaction with their current teaching status. Full-time business faculty received more professional services in all four areas—orientation, instructional support, professional development, and campus involvement--than part-time faculty. Part-time business faculty valued professional services differently than full-time in the areas of instructional support, professional development, and campus involvement. Master's and MBA degree holders had a statistically significant difference in perceived importance of instructional support they receive. Doctorate and bachelor's degree holders had a statistically significant difference in perceived importance of campus involvement.

Introduction

Faculty at the two-year college has been a diverse group since the concept of community college began; and they have different characteristics and needs than K-12 or four-year institutions (Catanzaro & Savage, 1986). According to O'Banion (1972), "unless the priority of the future is placed on people–the people who staff the peoples' college–the community college we know now may cease to exist and the community college we dream of may never come to be" (p. 40).

Utilization of part-time faculty is one of the most potentially volatile issues in higher education because of the inherent conflict between the obligation of institutions to provide high quality learning environments and the need to operate within financial constraints (Albert & Watson, 1980). Gappa and Leslie (1996) found part-timers are viewed as marginal, temporary employees who are given little incentive to stay and make long-term commitments to a particular institution. As enrollments decline and budgets tighten, both full-time faculty members and administrators are scrutinizing part-time employment practices more carefully. While numerous studies have examined various aspects of the community college, little research has dealt specifically with full- and part-time business faculty and the professional support services provided for these educational professionals.

Objectives of the Study

Objectives of this research were to identify the (a) status of full- and part-time two-year college business education faculty, and (b) perceived importance of selected professional services provided for faculty in the areas of faculty orientation, instructional support, professional development, and campus involvement. These specific research questions are addressed in this research report:

1. What is the status of full- and part-time two-year college business faculty?

2. What professional services are provided by two-year colleges for full- and part-time business faculty in the areas of (a) orientation, (b) instructional support, (c) professional development, and (d) campus involvement?

Literature Review

Historically, according to Lombardi (1992), part-time instructors comprised 39.5% of faculty in junior colleges in 1962. By 1971, this number was 40% and by 1974, it grew to nearly 50%. From 1973 to 1991, part-time faculty ranks tripled, and full-time faculty increased by only 15% (AACC, 1991). Kelly (1991), in attempting to ascertain part-time faculty needs, found that they were treated as second-class citizens. Few felt involved with the college and wanted more involvement. Faculty orientation is essential for facilitating the integration of new full- and part-time faculty into an educational organization by learning routine procedures. Miller and Nadler (1994) found that full-time community college faculty believed that assisting new faculty in understanding the mission of the institution was the most important objective for orientation programs.

Many part-time faculty may have limited skills dealing with instructional techniques. Usually when part-time faculty are hired, they are given a textbook with a copy of a previous syllabus and told to teach (Leitzel, 1990). However, effective instruction often depends upon the adequacy of the instructional support services that an institution provides for its faculty (Grymes, 1977). Professional development programs are designed to produce change in individual faculty and ultimately in the performance of the institution itself (Bauske, 1983). Research by Maxwell and Kazlauskas (1992) concluded that although faculty development programs were widespread, participation was low; and teachers most in need of development were least likely to participate. Professional development of part-time faculty, according to McGuire (1993), should include an orientation workshop, a mentor program, and workshops/seminars on topics such as testing, grading, and teaching techniques.

Kyre (1981) conducted a comparative study of full-and part-time faculty and found that part-time faculty had less frequent contact with college personnel and spent less time in non-teaching activities, such as committee work. Gappa and Leslie (1993) called for institutions to integrate part-time faculty into the fabric of the institution to ensure they would be successful, valued, and supported on the job.

Research Design and Procedure

Using a descriptive research design with the survey method, the study was conducted with 357 full-time and 375 part-time business faculty at public two-year colleges in the U.S.

Instrument Development and Validation

Since a search of the literature did not reveal an instrument for this specific study, an instrument was designed based on Herron's (1992) research instrument. A checklist was used to determine professional support services supplied to respondents by their institutions. Then the respondents were asked to rate the importance of the professional services through a Likert scale. The research instrument used consisted of three major parts: (a) Status and Demographic Information, (b) Professional Activities Provided by Employing Institution, and (c) Perceived Importance of Professional Services by Full- and Part-time Faculty.

The original survey was mailed to a panel of experts. The panel members made suggestions as how to clarify the survey instrument. Revisions were made and a pilot study was conducted with randomly selected full- and part-time business faculty who were not part of the sample.

The Cronbach Alpha was used to assess the internal consistency reliability on the Likert Scale in Part B of the Survey. The following subtest reliability scores were determined: Questions 1-5 Faculty Orientation--0.826; Questions 7-26 Instructional Support--0.929; Questions 28-34 Professional Development--0.911; and Questions 36-42 Campus Involvement--0.890. Total test reliability was 0.961.

Procedure

A stratified random sampling procedure was used to select 375 schools from the 888 accredited, publicly supported two-year colleges holding membership in the American Association of Community Colleges as listed in its 1998 Directory. Stratification was according to U. S. regions as identified by the National Business Education Association. Participants for the study were identified by the academic affairs officer or business department chair of the selected two-year schools; therefore, participants resulted from an identification process rather than random sampling of business faculty. Through the use of the Internet, schools and faculty were identified and contacted via e-mail.

Study Findings

From the 750 survey instruments sent, several were not deliverable resulting in an adjusted sample of 737; 485 instruments were returned, representing a 64.6% return rate. Of those returned, 483 (65.5%) responses were used for data analysis--274 full-time responses and 209 part-time responses. Responses were received from 316 of 375 institutions located in 46 of 50 states. Table 1 displays respondents by region.

Table 1
Respondents by Region

Respondents	Surveys Sent	Frequency Returned	Percent Returned	Percent by Region
Eastern	112	72	64.3	14.9
Mountain Plains	112	65	58.0	13.5
North Central	150	102	68.0	21.1
Southern	218	150	68.8	31.1
Western	158	94	59.5	19.5
Total	750	483	64.4	100.1*

*Rounding accounts for total above 100%.

Research Question 1. What is the status of full- and part-time two-year college business faculty?

Forty one percent of the respondents were in the 46-55 years of age range; 62% of the full-time instructors were women, and 57% of the part-time instructors were women. Two hundred and four (42.6%) of the respondents held Master's degrees while 126 (26.3%) held the MBA degree.

About half of the respondents said they were continuing their education. Three hundred eight (64.3%) indicated they did not hold public school certification. Only 31.9% of the respondents indicated any public school teaching experience. Three hundred sixty (74.5%) indicated no technical certifications.

According to Table 2, 210 or 43.8% of full-time respondents were tenured or tenure track faculty.

Table 2
Respondents by Employment Status

Status	Frequency	Percent
Full-time		
Tenured	176	36.7
Tenure Track	34	7.1
Non-Tenure Track	59	12.3
Part-time	204	42.5
Other	7	1.5
Total	480	100.1*

Notes: No Responses = 3. *Rounding accounts for total above 100%.

Table 3 delineates the courses taught by respondents. Accounting courses were most frequently identified by respondents.

Table 3
Courses Taught

Name of Course	Frequency
Principles I/Financial Accounting	105
Introduction to Business	82
Keyboarding	79
Principles of Management	56
Principles II/Managerial Accounting	52
Business English/Communications	49
Economics	48
Introduction to Computer Concepts	47
MicroSoft Office Suite	47
Marketing	36

According to Table 4, the full-time position held most frequently by part-time business faculty was that of accountant/CPA.

Table 4
Full-time Positions Held by Part-time Faculty

Position	Frequency	Percent
Accountant/CPA	14	16.9
Attorney	2	2.4
Banking	2	2.4
Business Owner	6	7.2
Computer Industry	3	3.6
Engineer	2	2.4
Employment Advisor	2	2.4
High School Business Teacher	4	4.8
Management	12	14.5
Public Education	6	7.2
Realtor	3	3.6
Two-year College Full-time Employee	14	16.9
Other	13	15.7
Total	83	100.0

One hundred twenty-nine (61.7%) of the part-time respondents indicated they receive no fringe benefits. One hundred twenty-five (59.8%) of the part-time respondents indicated a satisfactory arrangement with their assignment at the two-year college.

Research Question 2. What professional services are provided by two-year colleges for full- and part-time business faculty in the areas of (a) orientation, (b) instructional support, (c) professional development, and (d) campus involvement?

Two hundred eighteen (79.6%) full-time respondents indicated they were provided a faculty handbook which was the most frequently provided faculty orientation service. One hundred forty (67.0%) part-time respondents indicated that a faculty handbook was provided (Table 5).

Table 5
Faculty Orientation

Professional Service	Full-time No.	Full-time Percent N = 274	Part-time No.	Part-time Percent N = 209
Require attendance at orientation	208	75.9	110	52.6
Assign a mentor to new faculty	109	39.8	45	21.5
Provide a faculty handbook	218	79.6	140	67.0
Explain college's mission, philosophy, and goals	202	73.7	108	51.7
Provide a college policy manual	195	71.2	114	54.5

Ninety percent of full-time respondents said they were provided the following instructional support items: Office space/desk (91.2%); Access to copier (90.1%); Campus mailbox (90.9%); and Access to telephone (90.9%). For part-time respondents, the item provided most frequently was Access to copier (169 respondents; 80.9%).

Table 6 presents the identified professional development opportunities for faculty.

Table 6
Professional Development Opportunities for Faculty

Professional Service	Full-time No.	Full-time Percent N = 274	Part-time No.	Part-time Percent N = 209
Staff development workshops	239	87.2	117	56.0
Funds available to attend off-campus workshops	237	86.5	55	26.3
Funds available to attend professional meetings	217	79.2	44	21.1
Workshops held at convenient times during weekday	175	63.9	55	26.3
Workshops held during weekend	50	18.2	31	14.8
Workshop- topics selected by full- and part-time faculty	148	54.0	41	19.6
Workshops cover topics relating to instructional skills	170	62.0	66	31.6

For campus involvement activities, 243 (88.7%) full-time faculty served on college-wide committees. Part-time respondents only had one item above 50%--110 (52.6%) said they were included in social functions (Table 7).

Table 7
Campus Involvement of Faculty

Professional Service	Full-time No.	Full-time Percent N = 274	Part-time No.	Part-time Percent N = 209
Attend business division/ department meetings	241	88.0	90	43.1
Serve on college-wide committees	243	88.7	60	28.8
Eligible for honors and awards	188	68.6	45	21.5
Input into textbook adoptions	235	85.8	86	41.1
Included in social functions	216	78.8	110	52.6
Participate in graduation ceremonies	238	86.9	72	34.4
Opportunity to deliver instruction via interactive video/internet	213	77.7	71	34.0

Conclusions

1. Full-time business faculty receive more professional services in all four areas—orientation, instructional support, professional development, and campus involvement—than part-time business faculty do.

2. The majority of full- and part-time business faculty do not hold public school certification or have public school teaching experience; thus, the background of the community college faculty coming from the public K-12 is not as strong as it once was.

3. The typical full-time business faculty is female, over 46 years old, holds a Master's degree, and has access to professional services.

4. The typical part-time business faculty is female, over 46 years old, holds a Master's degree, is satisfied with current position, and has access to limited professional services.

5. Part-time business faculty are receiving more fringe benefits than have been available to part-time faculty in the past.

Recommendations

1. Since both full- and part-time business faculty received and valued the faculty handbook most, both full- and part-time business faculty should be supplied with faculty handbooks and procedures manuals.

2. Just as Herron (1992) found that part-time faculty desired office space, professional development, and contact with full-time faculty, this researcher found these items desired. Part-time business faculty should be provided more than access to the copier and a mailbox. There is a need for most other listed instructional support services.

3. There is a need for a structured, formalized professional development plan to include activities for both full- and part-time business faculty.

4. Just as research has shown that typical use of part-time faculty involves weak organizational support (Gappa & Leslie, 1993), this researcher also concluded weak organizational support especially in the area of campus involvement. Efforts should be made to include part-time business faculty in division meetings, textbook adoption meetings, committees, special events, and graduation.

Recommendations for Future Study

1. A study should be conducted to determine if business division chairs and full- and part-time business faculty perceive a difference in importance of professional services in the areas of orientation, instructional support, professional development, and campus involvement.

2. From this study, a full- and part-time business faculty needs assessment should be conducted to determine a ranking of professional services in each of the areas and to identify other professional support needs in areas other than the four from this study.

3. Follow-up to this study could be done via telephone interviews or focus groups with selected participants to determine if results would differ.

4. While much has been written in the literature about the value of mentoring, this did not surface as a much provided or valued orientation activity. Further research should seek to determine what is being provided in this area, why more is not being done, and why it is not perceived as important.

5. While this study had the participants identified by Academic Affairs Officers or Business Chairpersons, another study with participants selected randomly might yield different results.

6. Since fringe benefits surfaced as being provided to some part-time business faculty, additional study of types of benefits, amounts received, and parameters for receiving benefits would be beneficial for part-time faculty and administration.

References

Albert, L. S., & Watson, R. J. (1980). Mainstreaming part-time faculty: Issue or imperative? In M. H. Parsons (Ed.), Using part-time faculty effectively: New directions for community colleges, No. 30 (pp. 73-80). San Francisco: Jossey-Bass.

Author. (1991). American Association of Community Colleges annual fall survey. Washington, DC: American Association of Community Colleges.

Bauske, D. R. (1983). A critical analysis and evaluation of faculty development program outcomes in community colleges in the United States (Doctoral dissertation, The University of Texas at Austin). Dissertation Abstracts International, 44, 0966A.

Catanzaro, J. L., & Savage, D. D. (1986). Reshaping America's community colleges through new faculty hiring practices. Mentor, OH: Lakeland Community College.

Gappa, J. M., & Leslie, D. W. (1993). The invisible faculty: Improving the status of part-timers in higher education. San Francisco: Jossey-Bass.

Gappa, J., & Leslie, D. (1996). Employment profiles of part-timers. In D. E. Finnegan, D. Webster, & Z. F. Gamson (Eds.), Faculty and faculty issues in colleges and universities. Needham Heights, MA: Simon and Schuster.

Grymes, R. J., Jr. (1977). Staff development for adjunct faculty. Richmond, VA: J. Sargeant Reynolds Community College.

Herron, G. L. (1992). Adjunct faculty: Identification of significant policy issues for Tennessee's public 2-year institutions (Doctoral dissertation, George Peabody College for Teachers of Vanderbilt University). Dissertation Abstracts International, 53, 4224A.

Kelly, D. K. (1991). Part-time faculty in the community college; A study of their qualifications, frustrations, and involvement. Paper presented at the 31st Annual Forum of the Association for Institutional Research, San Francisco.

Leitzel, T. C. (1990). Implementing a team teaching approach for part-time faculty development. In Proceedings from National Conference on Professional Development of part-time occupational/technical faculty. Washington, DC: Office of Vocational and Adult Education.

Lombardi, J. (1992). The ambiguity of the part-time faculty. In J. Lombardi & A. M. Cohen (Eds.), Perspectives on the community college: Essays (pp. 51-67). Washington, DC: American Council on Education.

McGuire, J. (1993). Part-time faculty: Partners in excellence. Leadership Abstracts, 6(6), 1-3.

Maxwell, W. E., & Kazlauskas, E. J. (1992). Which faculty development methods really work in community colleges? A review of the research. Community/Junior College Quarterly of Research and Practice,16(4), 351-360.

Miller, M. T., & Nadler, D. P. (1994). Orientation program considerations for new community college faculty. Community College Journal of Research and Practice, 18, 441-448.

O'Banion, T. (1972). Teachers for tomorrow: Staff development in the community-junior colleges. Tucson: University of Arizona Press.

Engineering Professionals: Their Need For Computer Keyboarding Competency

Ms. Deborah K. Ryker
Benton High School

Dr. Marcia Anderson
Southern Illinois University

Abstract

This study sought to determine the need for computer keyboarding skills as viewed by engineering professionals. A random sample of 1995-1998 university engineering graduates was surveyed. The findings revealed that most respondents used the computer some part of each workday. However, over three-fourths of the engineering graduates indicated that possessing computer keyboarding skills was not a prerequisite for their work position. Most respondents stated that possessing computer keyboarding skills improved their work productivity substantially or some. The most common barriers for engineering graduates to learn computer keyboarding skills were that the skills were not required for their field of study and that they did not feel that the skills were important. Finally, when asked if computer keyboarding skills should be required or taught, the majority responded that they felt these skills should be required.

Introduction

The way day-to-day operations are conducted in virtually all organizations has changed dramatically. Computer keyboards can be found in almost every workplace: banks, libraries, pharmacies, factories, video stores, vehicles (Highland, 1997; Toppe, 1991; Sormunen, 1990). With the proliferation of computers, one cannot overlook the means of entering information into the computer (Robinson, 1991). The predominant method of data input is via the computer keyboard (Klopping, 1993). With 90% of all workers using a computer keyboard (Mitchell, 1998), keyboarding competency can no longer be considered only for individuals pursuing a vocational occupation (Gillmon, 1991; Erthal, 1998). It would seem that learning keyboarding skills would become a major concern for students, employees, and especially employers.

While many educators agree that keyboarding is needed by business professionals, a common fallacy that keyboarding is not needed by individuals outside business occupations still exists. To prepare students for a lifetime of productive computer use, it is imperative that keyboarding be taught to all future workers (Toppe, 1991). Little research has been conducted on the extent to which keyboarding skills are needed by non-business professionals. If data can be gathered revealing keyboarding skills are needed by employees in other fields of study, it would provide additional evidence that keyboarding is a vital skill needed by all workers in the workplace (Klopping, 1993).

Objectives of the Study

The objective of this study was to determine perceptions of professionals in engineering occupations regarding their need for computer keyboarding competency. Specific research questions addressed: (a) amount of time engineers spend using the computer; (b) perceived benefits and impact on productivity for engineers possessing keyboarding competency; and (c) barriers for engineers to obtain keyboarding competency.

Literature Review

Research reveals that Akeyboarding is a psychomotor skill that requires proper teaching by a qualified instructor who is knowledgeable of research findings and appropriate methods of teaching" (Olinzock, 1998, p. 24). In order for students to have a competitive edge in today=s job market, they must be able to proficiently input and extract data from a computer (Gillmon, 1991; Garfield, 1995). Much time is wasted at the computer terminal, according to Wentling (1990), and employers have not made the correlation between low productivity and employees= lack of keyboarding competency.

In spite of evidence supporting all workers needing keyboarding competence, some people believe that keyboarding is an obsolete skill which will not be needed in the future (Olinzock, 1998). The fact is that alternative computer input devices have not been perfected for wide adoption, and the keyboard remains as primary means for inputting and editing material on the computer.

According to Waner, Behymer and McCrary (1992),

> If keyboarding is to be beneficial, automaticity is required. Hunting and pecking requires conscious attention to what the fingers are doing. Consequently, students spend more time concentrating on how to keyboard than on the material they are composing. Students who are capable touch keyboarders can concentrate on problem solving and composing rather than on mechanics. (p. 28)

Therefore, keyboarding mastery requires repetitious application over a period of time. Keyboarding can be difficult to learn, but without formal training, bad habits can form and become almost impossible to break for those who try to take a keyboarding course at a later time (Artwohl,1989). "Keyboarding is a gateway to a whole host of other opportunities" (Hermann, 1997).

Teachers find it very difficult to teach computer applications such as word processing and spreadsheets when the students do not have basic keyboarding skills (Beam, 1996). Beca ıse in many cases the issue of acquiring keyboarding skills have not been addressed, many students develop their own keyboarding techniques, often referred to as the "hunt and peck" method (Pennington, 1993; Russell, 1994).

Many students are graduating from secondary and postsecondary institutions and entering the job market without possessing a skill which they will be called on to use each day in their work place.

Research Design and Procedure

Using a descriptive design with the survey method, the study was conducted among 1995-1998 College of Engineering graduates from a major midwestern university. Using a systematic sampling procedure, 382 subjects were identified. Wentling=s (1990) instrument to gather data from business graduates was modified for this research. Prior to the questionnaire's distribution, a pilot study, consisting of a sample of four engineering professionals, was conducted. The engineering professionals used in the pilot study were not included in the sample of the population. Following recommendations from an advisory committee and the pilot study participants, minor adjustments were made to the questionnaire to improve the clarity and readability of the instrument. Following the initial data-gathering mailing, one follow-up questionnaire was mailed to nonrespondents.

Data collected from the questionnaires were entered into the computer, using the spreadsheet software application, Microsoft Access 97. The returned questionnaires were examined for completeness. One hundred seventy-seven (54%) returned questionnaires were fully completed. Frequencies and percentages were calculated for each questionnaire item. From the 382 questionnaires sent, 55 were returned as undeliverable, and 189 were returned by subjects. Of the 189, one was returned unanswered, and 11 subjects were not currently employed; therefore, data from 177 (54%) usable instruments were analyzed.

Respondent Data

Table 1 presents the field of engineering in which respondents' were employed. The highest percentage of respondents (37.86%) were employed in "other" engineering occupations.

Table 1
Respondents by Industry Type

Industry Type	Frequency	Percent
Civil Engineering	20	11.30
Computer Engineering	11	6.20
Electrical Engineering	17	9.60
Engineering Technology	5	2.82
Industrial Technology	22	12.44

Mechanical Engineering	22	12.44
Mining Engineering	2	.13
Manufacturing Engineering	11	6.21
Other	67	37.86
Total	177	100.00

Research Findings

Research Question 1. How much of the respondents' time of a typical workday is spent using a computer?

As reflected in Table 2, 80 (45.21%) respondents spend greater than 60% of their workday using a computer.

Table 2
Respondents by Percent of Day Using Computer

Percentage of Work Day	Frequency	Percent
0-15%	15	8.47
16-30%	28	15.82
31-45%	29	16.38
46-60%	25	14.12
61-75%	27	15.26
76-90%	28	15.83
More than 90%	25	14.12
Total	177	100.00

Table 3 shows that 123 (69.49%) respondents indicated they had learned correct computer keyboarding techniques, using the correct fingering and stroking techniques, without looking at the location of the keys.

Table 3
Respondents by Correct Use of Computer Keyboard

Item	Frequency	Percent
Yes	123	69.49
No	54	30.51
Total	177	100.00

As reflected in Table 4, of the 123 respondents who learned correct computer keyboarding techniques, 88 (71.54%) respondents learned these techniques at the high school level.

Table 4
Respondents by Source of Correct Computer Keyboarding Instruction

Item	Frequency	Percent
At Home	6	4.88
Elementary School	0	0.00
Junior High or Middle School	17	13.82
High School	88	71.54
Technical School	3	2.44
Community College	4	3.25
University	2	1.63
Company Training Program	0	0.00
Individual Learning on the Job	2	1.63
Other	1	0.81
Total	123	100.00

Research Question 2. What benefits exist for respondents to learn computer keyboarding skills and do respondents think knowing computer keyboarding skills increase their productivity using a computer?

Those who indicated they had learned correct computer keyboarding (Table 3) were asked to what extent they thought these skills improved their productivity when using a computer. Of the 123 respondents in Table 5 the majority, 86 (69.92%) stated that possessing computer keyboarding skills substantially improved their work productivity.

Table 5
Respondents' Views on Computer Keyboarding Skills and Their Productivity

Item	Frequency	Percent
None	1	0.81
Little	6	4.88
Some	30	24.39
Substantial	86	69.92
Total	123	100.00

Respondents who indicated that they had not learned correct computer keyboarding skills were asked if they would like to learn these skills. As shown in Table 6, 40 (74.07%) respondents stated that they would like to learn correct computer keyboarding techniques.

Table 6
Respondents' Views on Learning Computer Keyboarding Skills

Item	Frequency	Percent
Yes	40	74.07
No	14	25.93
Total	54	100.00

The respondents who indicated they had not learned correct computer keyboarding skills were further asked to what extent they thought proficient computer keyboarding skills would increase their productivity. Of the 54 respondents in Table 7, 48 (89.89%) stated that acquiring computer keyboarding skills would increase their work productivity.

Table 7
Respondents' Views on Computer Keyboarding Skills and Improved Productivity

Response	Frequency	Percent
None	6	11.11
Little	14	25.93
Some	21	38.89
Substantial	13	24.07
Total	54	100.00

Research Question 3. What are the barriers respondents encounter in learning computer keyboarding skills?

Respondents who indicated they had not learned correct computer keyboarding techniques were asked to identify the barriers they encountered in learning computer keyboarding skills. The question was addressed to 54 respondents, and there were a total of 91 barriers identified. As shown in Table 8, 24 (26.37%) respondents did not think computer keyboarding skills were important. Thirty-two (35.16%) responses indicated that computer keyboarding skills were not required in the respondents' program of study.

Table 8
Respondents' Views on Barriers to Learning Computer Keyboarding Skills

Barrier	Frequency	Percent
They v ere not required in my program of study	32	35.16
I didn't think they were important	24	26.37
I did not have time to learn	12	13.19
Other	12	13.19
I was not given the opportunity	8	8.79
I thought I would not use a keyboard	3	3.30
Total	91	100.00

Regarding barriers to learning correct computer keyboarding skills, a respondent stated "Keyboarding should be mandatory at Jr. High and High School level. I was discouraged from taking typing by my High School guidance counselor (70's)." Another respondent stated), "Have tried self teaching programs, but quickly become bored."

Do respondents believe computer keyboarding skills should be taught/required? A majority of the respondents, 164 (92.66%), indicated that they felt formal computer keyboarding skills should be taught. One respondent stated, "I feel keyboarding is absolutely a requirement in today's society. Everybody should start being trained as soon as possible. There should be programs at all levels for people to become trained." Another respondent stated, "Formal keyboarding is perhaps the only subject I learned in school that I use daily. I believe that formal typing should be a requirement for high school or middle school."

Conclusions

The following conclusions were derived from the results of this study:

1. Most respondents use a computer for some portion of each workday.

2. Half of the respondents learned to use the computer keyboard correctly.

3. Most of the respondents who learned correct computer keyboard skills learned them at the high school level.

4. The majority of respondents were not required to have computer keyboarding skills prior to employment, and the majority of respondents did not receive computer keyboarding instruction during company training programs.

5. Most of the respondents, possessing computer keyboarding skills, indicated that computer keyboarding skills increased their work productivity.

6. Respondents, not possessing computer keyboarding skills, did not think the skills were important and did not take a computer keyboarding class because it was not required for their program of study.

7. Most of the respondents feel that computer keyboarding training should be required of everyone.

Recommendations

Based on the findings of this study, the following recommendations are offered:

1. The importance and value of computer keyboarding skills for students and employees needs to be disseminated to school administrators, guidance counselors, teachers, state representatives and employers. Individuals in the position to make

changes in school curriculum need to be made aware of the importance of computer keyboarding.

2. Since computers are being introduced at the elementary level, school officials should consider offering a course in computer keyboarding prior to a student's significant exposure to the computer.

3. Information needs to be disseminated among students, educators, employees and employers regarding the correlation between low productivity on the computer and low computer keyboarding skills. Many individuals do not realize that poor computer skills are directly related to poor computer keyboarding skills.

4. Before students are allowed to take a beginning computer course, they should be required to pass a computer keyboarding competency test. A minimum of 35 words a minute competency with two errors should be required of all students prior to enrollment in any computer course.

5. Since the majority of respondents indicated that computer keyboarding skills were not included in their company's training program, high schools, technical schools and community colleges should consider offering and promoting computer keyboarding classes. These classes should be offered when employees can take the courses, such as evenings and weekends.

6. Information needs to be disseminated to employers, across all industry types, regarding the correlation between work productivity and computer keyboarding skills. The importance of computer keyboarding skills needs to be promoted. Many employers are completely unaware of the correlation.

References

Artwohl, M. J. (1989). What research says about keyboarding skills and computer anxiety. (ERIC Document Reproduction Service No. ED 312 444)

Beam, K. (1996, November 14). Reading, writing, and keyboarding. Shawnee Mission children learn the ways of computers. Kansas City Star, p. C1.

Erthal, M. J. (1998). Who should teach keyboarding and when should it be taught? Business Education Forum, 53(1), 36-37.

Garfield, L. (1995). The key to increasing enrollment in keyboarding. Business Education Forum, 49(4), 36-37.

Gillmon, E. (1991). Keyboard proficiency: An essential skill in a technological age. (ERIC Document Reproduction Service No. ED 348 557)

Hermann, J. R. (1997, January 13). Unlearning the hard way. The Tennessean, p. B4.

Highland, P. J. (1997). Voice recognition technology. Business Education Forum, 52(1), 30-32.

Klopping, I. M. (1993). Don't lose control. Business Education Forum, 47(4), 41-42.

Mitchell, W. (1998, March). The future of keyboarding. Speech presented at the National Business Education Association Conference, San Antonio, Texas.

Olinzock, A. A. (1998). Computer skill building--The answer to keyboarding instruction. Business Education Forum, 52(3), 24-26.

Pennington, J. R. (1993). An investigation of the need to teach keyboarding at the elementary level in Kentucky. Unpublished master's thesis, Shenandoah University, Winchester, VA.

Robinson, J. E. (1991). The effects of prior computer usage on teaching beginning typing technique. American Secondary Education, 20(1), 20-22.

Russell, R. (1994). Teaching keyboarding to elementary children. In McEntee, A. (Eds.), Expanding Horizons in Business Education, (pp. 1-17). Reston, VA: National Business Education Yearbook.

Sormunen, C. (1990A). An assessment of significant keyboarding issues. Business Education Forum, 44(8), 20-22.

Toppe, J. E. (1991). Keyboarding--An enabling skill. Business Education Forum, 46(2), 22-24.

Waner, K., Behymer, J., & McCrary, S. (1992). Two points of view on elementary school keyboarding. Business Education Forum, 47(1), 27-29.

Wentling, R. M. (1990). Computer keyboarding skills needed by business professionals. The Delta Pi Epsilon Journal, 32(1), 15-25.

Early Field Experience: One Approach to Contextual Teaching and Learning

Dr. Wanda L. Stitt-Gohdes
The University of Georgia

Introduction

Transfer of knowledge has long been an issue as students move from the classroom to the workplace. For years many educators believed that simply because students studied and learned something in class, they would be able to apply it later in a meaningful way at their place of employment. Even a brief perusal of training and development programs in business and industry and the amount of funds allocated to such programs indicates the likelihood that significant transfer does not occur. Indeed, transfer is only successful when the learner recognizes similarities in context between what is being learned and where it will be applied.

We do know that students' understanding of a particular topic depends on what they already know about the topic. This means educators at every level must realize knowledge is not static but is dynamic and is transformed over time. "The creation of learning communities thus depends on a dynamic combination of engagement, imagination, and alignment to make this interplay between the local and the global an engine of new learning" (Wenger, 1998, p. 228).

Two years ago a group of faculty from the College of Education at The University of Georgia received a contract from the U.S. Department of Education to develop a preservice teacher education model of excellence which centers around contextual teaching and learning (CTL). The major components of CTL include experiential, real world experiences in the home, community, and workplace settings that connect prior and ongoing experiences deliberately–as opposed to incidentally–to problem solving, higher order thinking skills, collaboration, sensitivity to issues of equity and diversity, and reflection.

Learning to identify and solve problems in multiple contexts–various situations in which learners find themselves–can enhance our ability to apply our current understandings to new contexts (transfer of learning) and/or to generate new understandings in the same context (development of knowledge). Not only is the concept of learning in context important for secondary school students, it is also critical for preservice teacher education students. For these future educators, the view of knowledge as both process and product or outcome means that the end product (education) is as much dependent on the process of learning as it is on the content to be learned.

Thus, the dilemma is that many preservice teacher education models only place students in schools–the context in which they will ultimately work--during their student teaching experience–at the end of their college education. Several years ago, The

University of Georgia began to require early field experiences of our business education students. Students spend an entire year in middle and high school classrooms prior to their student teaching experience, providing multiple opportunities for these preservice candidates. First, they are able to experience actual school settings–the context in which they have said they want to work. Second, as they experience both the middle and high school levels, it can be helpful in deciding at which level they may ultimately choose to teach. Third, as the placements must be in different school districts, they also experience diverse student populations. Finally, this early exposure helps affirm–or sometimes negate–their decision to become a business education teacher.

Thus, the purpose of this study was to examine the reflections of these early field experience students in business education as a school-based element of CTL. Specifically, students were asked to reflect on the following as they related to the school and students they observed this semester:

1. Describe the extent to which you saw students really involved in critical thinking and problem solving. Problem-based learning is an instructional approach that uses real-world problems as a context for students to learn critical thinking and problem-solving skills, and to acquire knowledge of the essential concepts of a course. Were these situations contrived or connected in some way to the world outside of school?

2. What effort/opportunity did you observe where a specific connection was made between what was learned in class and how that may be used outside of class? Work-based learning is an instructional approach in which students use the context of the workplace to learn content of school-based courses and how that content is used in the workplace.

3. To what extent did you see "authentic instruction" being modeled? Authentic instruction fosters thinking and problem solving skills that are important in out-of-school settings. It is instruction that allows students to learn in meaningful contexts.

4. Finally, how have these observations helped you identify problems and solutions regarding effective instruction? Have you recognized a need to connect school-based learning with work-based learning? How might you make that connection with your students when you become a classroom teacher?

Conceptual Base

Contextual teaching enables learning in which students employ their academic understandings and abilities in many in- and out-of-school contexts to solve simulated or real-world problems. This construct of CTL has sweeping ramifications. It should influence and guide the design of teacher preparation programs. Also, while increased student achievement is critical, some might suggest the ultimate goal of school is graduates who are able to learn and solve problems in a variety of complex *contexts* throughout their lifetime, no small task! One may conclude, then, that ***contextual***

learning occurs when students apply and experience what is being taught referencing real problems associated with their roles and responsibilities as family members, citizens, students, and workers.

Characteristics of CTL "include teaching and learning that is problem-based; fosters self-regulated learning; occurs in multiple settings or context; anchors teaching and learning in students' diverse life contexts; uses teams or interdependent group structures so students can learn from each other; views learning as situated, social, and distributed; and employs multiple methods for assessing student achievement" (Sears & Hersh, 1999, p. 5).

Findings and Conclusions

Twenty business education students were enrolled in early field experience spring semester 2000; nine were in middle schools and eleven were in high schools. This was the second semester of field experience for all these students.

The students were first asked to describe the extent to which they saw students really involved in critical thinking and problem solving. They were also asked to determine if the situations were contrived or connected in some way with the world outside of school. Most of these students did see problem solving as a key part of the learning process as was a connection with the "outside" world. Perhaps the best example was reported by "C" in observing a Banking and Finance class where each student opened a checking account at the "class bank" by completing the application for a checking account. They "earned" their checking account money by being on time for class, being prepared in class, turning assignments in on time. Conversely, they were charged for expenses such as rent on their space in class, fees for checks they used, charges for items they borrowed in class, and charges for not being prepared in class. Of course they were also required to balance their checkbook and reconcile their bank statements. An additional task required they figure out if they had enough "money" to make it from one "pay period" to the next–well grounded in a life after high school!

Many students reported evidence of critical thinking and problem solving in spreadsheet classes. Students in these classes were being asked to design spreadsheets to manage and report data for a "company." One field experience student engaged his high school students in a fictional activity where they planned their Grandmother's birthday party. Their "budget" was $100, and they used a spreadsheet program to manage their money. In this way, they not only learned how to use a spreadsheet, but they also learned about budgeting money. This also provided a non-business yet real-world connection with classroom learning. Another example, in a database class, was where the students were given a scenario where the "company" they worked for was having a hard time keeping track of their employee records. The assignment was to develop a database to manage employee records–an excellent problem solving situation as well as one connected to the world of work. Another field experience student reported on her experience in a Website Design class where students had to develop a Website and were

faced with time deadlines, specific guidelines, and a prescribed set of tools to work with. This experience mirrored those they may encounter later after they leave high school.

Middle school students in a Money Management class had to develop a personal budget, balance their checkbook, and begin to learn about the stock market. Students in a computer technology class worked with students in family and consumer sciences to develop a wedding invitation for a mock wedding. They incorporated problem solving and cooperative learning in this situation–one many will be involved in later in life!

Unfortunately, five of the field experience students felt there was little or no evidence of critical thinking, problem solving, or connection with the world outside of school in the activities they observed. Typically they reported much lecture, much rote memorization, no opportunity for problem solving or critical thinking. This quote from a field experience student perhaps reflects the tenor of responses, "I cannot possibly tell you the number of times I heard the students say, "Why do we have to do this?""

Next students were asked to relate those opportunities where a specific connection was made between what was learned in class and how that may be used outside of class. This quote from "A's" paper, exemplified the best cases: " [my teacher] constantly reinforced the concepts she taught in class with connections to the real world. Students clearly understood how they could use the knowledge and skills learned in Mrs. X's Career Connections class in the real world." In this class student learned how to complete job applications, write resumes, and develop reference lists. Guest speakers were invited to reinforce what students had already learned. Another field experience student reported on a High School Survey class where the students produced a news broadcast. Every decision regarding the newscast was made by the students. They also learned to meet deadlines, problem solve, work cooperatively, and think and plan ahead. Another watched students, many of whom held part-time jobs, learn about computing payroll, including hourly wages, overtime, and holiday pay. In a lesson on Excel, a field experience student was teaching a lesson on budgeting. One student had already developed his own budget based on what he'd learned in the class. The field experience student congratulated the student and provided further encouragement by allowing the student to use the budget he'd developed and extend it by calculating how much he would need to save to restore an old pickup truck!

In a work-based class, a field experience student saw how the classroom teacher discussed with her students world events and work-related events from the previous week. As students told their stories, the teacher made a deliberate connection between the workplace and what they could learn from their experiences. In other classes students observed business education students developing Websites, learning the importance of one's character, learning fundamental consumer skills such as balancing a checkbook and writing appropriate business letters. Others observed guest speakers in classes talking about their everyday lives in the business community and how closely related classroom learning is to needed work-based skills.

Again, unfortunately, some students saw no evidence of a connection between in-class learning and out-of-class needs. For example, one field experience student observed an English teacher who was attempting to help students learn new words by developing sentences using the vocabulary words. No mention was made, however, of the lifelong value of a wide and varied vocabulary. Again, frequent, simple reproduction of textbook documents occurred in keyboarding classes with little or no explanation or reason why the work was required nor what might be learned from the drill. Several students reported no obvious or specific connection being made to the world of work. Admittedly, these students were in middle schools; however, students even at this level need to know the *why* of what they are doing. It provides a *connectedness* to something beyond rote memorization and reproduction.

Next, students were asked the extent to which they saw "authentic instruction" being modeled. Authentic instruction fosters thinking and problem solving skills important in out-of-school settings. One field experience student wrote, "Authentic instruction is a main focus of instruction at XX High School. The teachers there believe that students learn better when they actually do what they are being taught." Students in these classes actually apply what they are taught. In a Banking and Finance class, one student observed the use of rubrics, providing clear expectations, similar to performance evaluations in the workplace. In an Excel class, a field experience student observed an assignment dealing with interest rates and payment calculation. As part of the assignment, students could choose the kind of car or type of home they wanted to "purchase" to determine what the monthly payment would be. This led to a discussion regarding interest rates and the effect of having good or bad credit on the interest rate a bank may offer a patron–exactly the kind of experience they will definitely encounter later in life.

In a Career Connections class, the field experience student witnessed student evaluation of five fictitious interview scenarios. Students looked for appropriate interview behavior, punctuality, dress, and manners. Two students reported a similar practice where at the start of class the teacher would write a question on the board which students had to answer in their journals. They were required to think critically to answer the question; they could also work cooperatively with classmates to find the answer. In other classes, field experience students saw teachers use everyday, real-world examples to connect school-based learning with work-based needs. In a middle school, one field experience student wrote, "Authentic instruction was used quite effectively . . . . The students that obtained skills in the keyboarding classes that I observed will be able to use those same skills in other classes to write papers and create documents in an effective and efficient manner for other classes and in other situations that could occur at the home or at a job." And when this teacher was asked why they needed to know how to type, she consistently provided a variety of situations where this skill would be need, such as finding a job.

Again, there were other schools where little or no authentic instruction was observed. One field experience student reported no evidence of higher-order thinking or

problem-solving strategies. Another student said she never saw the classroom teacher teach the students; she simply told them where they could find their assignments on the Internet. And yet another field experience student wrote, "None of the teachers tried to show the students how important learning things are for the real world. They never told the kids that math will help them with checking accounts, taxes, and sales at stores. No connection was made to tell students about this helping in the real world." Another student wrote, "The world outside of the school was not brought into the classroom."

Finally, students were asked how their observations helped identify problems and solutions regarding effective instruction and how they, as future teachers, would help their students connect school-based learning with work-based learning. Consistently, field experience students reported the benefits of their observations. These statements from students' papers best express these sentiments.

- "Seeing both sides of the coin has allowed me to see how beneficial contextual learning can be. It also allowed me to see what I hated about school, doing things for no reasons. There is a direct need in bringing classroom learning and work-based learning together. The main key is to remember that every little thing that we learn is involved in the real world."

- "After these observations I realize that students need so much more than a textbook and teacher. Students needs to touch, smell, hear, taste, and see in order to learn. Also, I now know that it's imperative that students know why what they are learning is important and how they'll use it later in life."

- "As I was thinking about these questions, I remembered when I was in school and how I would often wonder if I was ever going to use what I learned in school outside of class. My teachers never did explain the connection between school and work. Students will learn best if they know how they will use materials outside school."

Consistently, field experience students reported on the need to connect school-based learning with needed work-based skills. Some observed this connection as a motivating factor. Others saw the connection as a way to make discussions more meaningful and interesting.

Two students identified problems regarding effective instruction and posed plausible solutions. One student stated, "Another problem I saw was spare time and extra time in the classroom. It is imperative that students are kept occupied, and not with busy work. This free time is also a good way to bring in the outside world." Another student, hesitant to criticize a teacher, was really disturbed at rarely ever seeing the classroom teacher "lecture or teach a topic, rather she would tell the students what to work on at the start of each period. It seems hard to incorporate CTL into the classroom if no actual interaction with the students takes place. She would circle the room and answer questions, but no actual discussion ever took place when I was present."

Most University students observed high school and middle school students involved in critical thinking and problem solving, much of which was directly connected to the world outside of school. These preservice candidates were able to determine that most teachers they observed made a concerted effort to connect learning in class with work outside of class. Fewer students observed authentic instruction being modeled, and most reported being disturbed at that finding. In these situations, students were more likely to follow instructions, eliminating the need or opportunity to think critically and problem solve what needed to be done and how it should be done. Finally, all the students' paper reviewed indicate the extraordinary usefulness of these early field experiences in seeing the need to contextualize classroom learning, to connect school-based learning with work-based learning. It also gave them opportunities to think about how they might approach teaching various business education subject differently from the teachers whom they have observed.

One may conclude when these students enter the methods and curriculum classes, they will be better prepared to understand and demonstrate the connection between school-based learning and work-based learning.

Implications and Recommendations

The experiences reported by this group of early field experience students provided an insight into the context of their future work. They saw real problems, some of which were solved and other which were not. Many saw dedicated teachers consistently connecting classroom work with future contexts for middle and high school learners. Perhaps more importantly for preservice teacher education programs, the observation may be made that early involvement with schools and school children is an integral piece of their preparation. Not only does it get them actively involved in schools prior to student teaching, but it also provides a real context where they may apply that which they already know and are able to do.

Based on these findings, I would strongly recommend the inclusion of extensive early field experiences in business education preservice programs. These early field experiences provide a context where these candidates may observe the extent to which current business education teachers make a specific connection between school-based learning and work-based learning. This is borne out by one of the comments in student's papers. "To just simply assign the students to create a spreadsheet is not enough. It's important to remind them how they could use this to balance a checkbook, keep up with attendance, or record inventory. If they knew their jobs just might depend on these skills one day, more attention might be paid to what they are learning." And finally, "Students have the right to know why they have to learn something."

References

Sears, S.J. & Hersh, S. (1999). *Preparing teachers to use contextual teaching and learning strategies to enhance student success in and beyond school.* Sponsored by USDOE/OVAE and The National School-to-Work Office.

Wenger, E. (1998). *Communities of practice.* Cambridge, UK: Cambridge University Press.

Issues of Multicultural Education: Attitudes of Business and Marketing Education Teachers

Elaine Adams
Helen C. Hall
The University of Georgia

Abstract

Student populations within business and marketing education classrooms, like our nation, are growing increasingly diverse. It is important that business and marketing education teachers exhibit attitudes conducive to the educational needs of a diverse group of learners. This study used a survey instrument to examine inservice business and marketing education teachers' attitudes toward issues of multicultural education. Findings from this study are linked to a variety of multicultural issues, including equal opportunities for all students, contributions of minority cultures, and multicultural values, beliefs, and lifestyles. Descriptive findings developed a baseline of information important to the assessment of business and marketing education teachers' attitudes toward cultural pluralism. Business and marketing education teachers tended to reflect positive attitudes about the multicultural issues raised. Results from this study will be useful to preservice and inservice business and marketing education teachers, teacher educators, public school administrators, and vocational directors.

Business and marketing education teachers and students live and work in a multicultural and diverse society. It is essential for business and marketing educators to accept, teach, and prepare a multicultural student body. Many fundamental challenges facing today's business and marketing educators are their abilities to be responsive to an increasingly diverse nation, workforce, and student population. Teachers' attitudes toward issues related to multicultural education will help to shape the future success and strength of business and marketing education students.

During the 1960s, black civil rights movements in the United States inspired similar actions throughout other parts of the Western world (Banks, 1987). A major goal of these ethnically motivated events was empowerment and liberation through educational reform (Banks). A variety of educational and curricular programs, projects, and innovations have been employed to encourage the acceptance, inclusion, and growth of multiculturalism within our public schools (Banks). However much of the educational reform that has been infused into American education is superficial, fragmented, and tends to encourage racism through cultural misconceptions and stereotypes (Banks). Educational structures continue to focus on Anglo and European development. According to Wang and Kovac (cited in Latham, 1997), the ideology of American schools and their educational programs have remained mostly homogeneous while the student population has grown enormously diverse.

Educators have provided many excuses for this lack of knowledge, growth, and appreciation of multicultural needs and issues. Banks (1987, 1993a) identifies some of the most prevalent: schools that are not ethnically diverse or do not experience racial problems do not need educational reform; lack of administrative support, effective teaching materials or inservice training; and most importantly, basic ideology. Theodorson and Theodorson (cited in Banks, 1987) described ideology as "a system of ideas, beliefs, traditions, principles, and myths held by a social group or society that reflects, rationalizes and defends its particular social, political, and economic interests (p. 537)." True educational reform can only take place after teachers' ideologies have been scrutinized to determine their beliefs and commitment to multicultural education. Business and marketing education teachers preparing our youth for the workforce of this new millenium must possess ideologies that serve all students and are characterized by multicultural knowledge, preparation, and commitment.

James Banks, University of Washington professor of education and an expert on multicultural education suggests that schools with a rich multicultural focus share five dimensions (1993b). The first dimension, content integration, is the extent to which teachers use examples, data and information from a variety of cultures to illustrate the key concepts, principles, generalizations, and theories in their subject area. The second dimension, knowledge construction process, encompasses the procedures by which social, behavioral, and natural scientists create knowledge in their disciplines. "A multicultural focus on knowledge construction includes discussion of the ways in which the implicit cultural assumptions, frames of reference, perspectives, and biases within a discipline influence the construction of knowledge" (p. 24). The third dimension, prejudice reduction, focuses on the characteristics of children's racial attitudes on strategies that can be used to help students develop more positive racial and ethnic attitudes. The forth dimension, equity pedagogy, is evident when teachers use techniques and teaching methods that facilitate the academic achievement of students from diverse racial and ethnic groups and from all social classes. Finally, the fifth dimension, an empowering school culture and social structure, requires the restructuring of the culture and organization of the school so that students from diverse racial, ethnic, and social-class groups will experience education equity and a sense of empowerment.

Multicultural education consists of three major components: an idea or concept, an education reform movement, and a process (Banks, 1993b). "As an idea or concept, multicultural education maintains that all students should have equal opportunities to learn regardless of the racial, ethnic, social-class, or gender group to which they belong" (Banks, 1995, p. 390). As a reform movement, multicultural education aims to reform schools so that all students have an equal opportunity to learn. And, multicultural education is a continuous process with a goal to create "within schools and society the democratic ideals...such as justice, equality, and freedom" which are never totally achieved.

According to Banks (1993b), "multicultural content has made significant in roads into both the school and college

curricula within the last two decades" (p. 24), although it remains on the margins rather than in the center of the curriculum. Progress has been made in the preparation of teachers, with a significant number of today's teachers having completed a required course in multicultural education when in college. A standard for multicultural education adopted in 1979 by the National Council for Accreditation of Teacher Education has been a major factor in stimulating the growth of multicultural education in teacher education programs. The standard stated: "The institution gives evidence of planning for multicultural education in its teacher education curricula including both the general and professional studies components" (NCATE 1977, p. 4).

Purpose and Significance

Student populations in business and marketing education, like our nation, continue to grow increasingly diverse. Business and marketing education has always been successful at responding to the needs of a changing American society and workforce. It is now necessary for business and marketing education to meet the needs of an increasingly diverse student population. Gaining information about the multicultural beliefs held by business and marketing education teachers will help us to move in the direction required by the needs and responsibilities of a culturally diverse nation, schools, and workforce.

According to Butt and Pahno (1995), teaching in a multicultural society and providing excellence and equality in education is not easily accomplished. Business and marketing educators need to possess beliefs and qualities that respect, understand, and embrace diversity. Therefore, an assessment of business and marketing educators' attitudes toward issues related to multicultural education was warranted, especially since an overwhelming majority of public school teachers remain white (87.8%, National Center for Education Statistics, 1995). The purpose of this study was to examine inservice business and marketing education teachers' attitudes toward issues related to multicultural education using a survey instrument.

Methodology

The target population for this study included all business and marketing education teachers in Georgia. According to a state-supplied list, Georgia has 1400 business and marketing education teachers. Krejcie and Morgan (1970) report a sample size of 302 is required to be representative of the opinions of a population this size. An over sampling technique was employed to ensure a representative sample size. A total of 315 business and marketing education teachers responded to the survey. Therefore, the number of surveys returned met the sample size standards described by Krejcie and Morgan.

The research sample included 79 (25%) male participants, 233 (74%) female respondents, and 3 (1%) respondents did not identify their gender. Survey participants consisted of 38 (12%) middle school teachers, 274 (87%) high school teachers and 3 (1%) teachers did not indicate their teaching level.

Stanley (1992, 1996) originally developed the survey instrument used in this study to assess the attitudes of preservice physical education teachers toward multicultural education. For the purposes of this study, survey statements were slightly modified to reflect inservice career and technical teachers rather than preservice physical education teachers. A 6-point Likert type scale was used as the response mechanism for 19 statements. Participants were asked to select one of 6 possible responses: 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, and 6 = strongly agree. Reliability measures, performed by Stanley (1992, 1996) included tests of internal consistency and test-retest analysis. The complete instrument had an alpha reliability coefficient of .91. Its test-retest reliability coefficient equaled .84.

A random sample of business and marketing education teachers were mailed an informational letter and multicultural education survey. Sample members were asked to return the instrument within two weeks and were provided a postage-paid, self-addressed envelope for their convenience. No form of survey follow-up was conducted since the representative sample size was achieved on the first mailing.

The reported attitudes of business and marketing education teachers have been analyzed using baseline frequencies and percentages. Means and standard deviations representing each of the 19 statements presented to members of the sample are provided. Additional comments, not solicited but provided by respondents are reviewed.

Findings

It was the purpose of this study to generate findings regarding business and marketing education teachers' attitudes toward issues of diversity and multicultural education. Data representative of the 19 statements presented and responses recorded by business and marketing education teachers are provided in Table 1. Means and standard deviations associated with each statement also are identified in Table 1.

Table 1

Multicultural Attitudes of Inservice Business and Marketing Education Teachers

Statements	Mean	SD	1* f(%)	2* f(%)	3* f(%)	4* f(%)	5* f(%)	6* f(%)	0* f(%)
1. Each student should have an equal opportunity to learn and succeed in vocational	5.77	.636	3 (1.0)	0 (0.0)	1 (0.3)	3 (1.0)	46 (14.6)	261 (82.9)	1 (0.3)

education.									
2. Each minority *culture has* something positive to contribute to American society.	5.55	.723	2 (0.6)	1 (0.3)	2 (0.6)	11 (3.5)	101 (32.1)	198 (62.9)	0 (0.0)

Table Continues

Statements	Mean	SD	1* f(%)	2* f(%)	3* f(%)	4* f(%)	5* f(%)	6* f(%)	0* f(%)
3. There is really nothing that educational systems can do for students who come from lower socioeconomic groups.	1.53	.775	179 (56.8)	119 (37.8)	8 (2.5)	5 (1.6)	2 (0.6)	2 (0.6)	0 (0.0)
4. Vocational educators should plan activities that meet the diverse needs and develop the unique abilities of students from different ethnic backgrounds.	4.84	1.135	4 (1.3)	14 (4.4)	17 (5.4)	55 (17.5)	126 (40.0)	98 (31.1)	1 (0.3)
5. Students should be taught to respect those who are different from them..	5.75	.521	1 (0.3)	0 (0.0)	0 (0.0)	3 (1.0)	68 (21.6)	243 (77.4)	0 (0.0)
6. Students should feel pride in their heritage.	5.68	.549	0 (0.0)	1 (0.3)	0 (0.0)	7 (2.2)	83 (26.3)	22.4 (71.1)	0 (0.0)
7. Vocational educators should help students develop respect for themselves and others.	5.65	.562	0 (0.0)	1 (0.3)	1 (0.3)	5 (1.6)	92 (29.2)	216 (68.6)	0 (0.0)
8. Minority individuals should adopt the values	3.33	1.500	42	76	29	85	65	16	2

and lifestyles of the dominant culture.			(13.3)	(24.1)	(9.2)	(27.0)	(20.6)	(5.1)	(0.6)
9. Minority individuals are hard to work with in vocational education.	2.40	1.352	92 (29.2)	115 (36.5)	25 (7.9)	58 (18.4)	10 (3.2)	11 (3.5)	4 (1.3)

Table Continues

Statements	Mean	SD	1* f(%)	2* f(%)	3* f(%)	4* f(%)	5* f(%)	6* f(%)	0* f(%)
10. The perspectives of a wide range of ethnic groups should be included in the curriculum.	4.56	1.200	4 (1.3)	23 (7.3)	24 (7.6)	661 (21.0)	132 (41.9)	62 (19.7)	4 (1.3)
11. In vocational education, it does not matter if a student is rich or poor, everyone should have the same chance to succeed.	5.81	.470	1 (0.3)	0 (0.0)	0 (0.0)	0 (0.0)	56 (17.8)	257 (81.6)	1 (0.3)
12. I enjoy being around people who are different from me.	4.86	.948	0 (0.0)	12 (3.8)	12 (3.8)	58 (18.4)	158 (50.2)	73 (23.2)	2 (0.6)
13. Vocational educators are responsible for teaching students about the ways in which various cultures have influenced the various vocations in this country.	4.23	1.166	6 (1.9)	31 (9.8)	26 (8.3)	103 (32.7)	118 (37.5)	30 (9.5)	1 (0.3)
14. I am uncomfortable around the students whose ethnic heritage is different from my own.	2.22	1.430	111 (35.2)	133 (42.2)	15 (4.8)	20 (6.3)	18 (5.7)	18 (5.7)	0 (0.0)

15. Students should give up their cultural beliefs and practices to fit in with other students.	1.98	.952	102 (32.4)	154 (48.9)	29 (9.2)	26 (8.3)	2 (0.6)	2 (0.6)	0 (0.0)

Table Continues

Statements	Mean	SD	1* f(%)	2* f(%)	3* f(%)	4* f(%)	5* f(%)	6* f(%)	0* f(%)
16. Cultural diversity is a valuable resource and should be preserved.	4.99	.946	4 (1.3)	4 (1.3)	12 (3.8)	41 (13.0)	162 (51.4)	91 (28.9)	1 (0.3)
17. Vocational education activities should be representative of a wide variety of cultures.	4.63	1.153	3 (1.0)	23 (7.3)	17 (5.4)	69 (21.0)	135 (42.9)	68 (21.6)	0 (0.0)
18. Cultural diversity is a negative force in the development of American society.	2.02	.984	97 (30.8)	156 (49.5)	29 (9.2)	25 (7.9)	5 (1.6)	2 (0.6)	1 (0.3)
19. All students should learn about cultural differences.	5.09	.940	3 (1.0)	6 (1.9)	5 (1.6)	45 (14.3)	143 (45.4)	112 (35.6)	1 (0.3)

*1 = Strongly Disagree

2 = Disagree

3 = Slightly Disagree

4 = Slightly Agree

5 = Agree

6 = Strongly Agree

0 = No Response

Conclusions

1. Each student should have an equal opportunity to learn and succeed in vocational education. An overwhelming majority of respondents agreed or strongly agreed with this statement (97.5%). It appears business and marketing education teachers believe all students should be provided equal opportunities through our educational processes.

2. Each minority culture has something positive to contribute to American Society. Business and marketing education teachers tended to recognize the positive contributions of other cultures in our society. A total of 95% agreed or strongly agreed with this statement.

3. There is really nothing that educational systems can do for students who come from lower socioeconomic groups. A large majority of business and marketing education teachers strongly disagreed or disagreed with this statement (94.6%). Thirteen of the respondents either agreed or strongly agreed (1.3%), indicating that most business and marketing education teachers believe that education is able to help those students from lower socioeconomic backgrounds.

4. Vocational educators should plan activities that meet the diverse needs and develop the unique abilities of students from different ethnic backgrounds. This statement brought forth an interesting split among business and marketing educators. While still relatively small in percentage, 11.1% of respondents at least slightly disagreed with the statement. This finding indicates a small level of adversity to the development of activities designed for students from diverse ethnic backgrounds. However, a majority (88.6%) of responding teachers slightly agreed, agreed, or strongly agreed with the statement.

5. Students should be taught to respect those who are different from them.. Most respondents agreed or strongly agreed with this statement (99%). It is evident that these teachers believe it is important to demonstrate respect to other people.

6. Students should feel pride in their heritage. Responses to this statement tended to illustrate that business and marketing education teachers believe in pride for ones' heritage. A total of 99.6% slightly agreed, agreed, or strongly agreed with the statement.

7. Vocational educators should help students develop respect for themselves and others. The vast majority of business and marketing education teachers thought it important to assist students in developing respect for themselves and others. Participants tended to agree with the statement at some level (99.4%).

8. Minority individuals should adopt the values and lifestyles of the dominant culture. This statement generated an interesting split among respondents. A total of 46.6% disagreed with this statement at some level and 52.7% agreed with it at some level. Its mean was 3.33, indicating that participants were more likely to disagree than to agree. Responses to this statement indicate that there are definitely mixed feelings regarding the adoption of values and lifestyles of the dominant culture in a society. Since we confront this issue daily, it may be beneficial for career-technical teachers to gain additional guidance or instruction in this area.

9. Minority students are hard to work with in vocational education activities. Some business and marketing teachers responding to this survey find it difficult to work with minority students. At least 25% agreed with this statement at some level. However, the majority 73.6% disagreed at some level. Business and marketing educators experiencing difficulties dealing with minority students may need to consider obtaining guidance with regard to minority students in their classes and programs.

10. The perspectives of a wide range of ethnic groups should be included in the curriculum. This statement generated some disagreement among respondents. Sixteen percent slightly disagreed, disagreed, or strongly disagreed with the statement. Respondents agreeing at some level equaled 82.6%. The rise of ethnic diversity in business and marketing education may make it advantageous for these teachers to explore ways to include the perspectives of other ethnic groups in their teaching.

11. In vocational education, it does not matter if a student is rich or poor, everyone should have the same chance to succeed. Nearly all respondents indicated agreement with this statement—99.4% agreed or strongly agreed. Business and marketing teachers responding to this survey seem to believe that all students should be given the same chance to succeed.

12. I enjoy being around people who are different from me. Business and marketing teachers responding to this survey appear to enjoy being around a diverse group of people. A large majority (91.8%) slightly agreed, agreed, or strongly agreed with this statement.

13. Vocational educators are responsible for teaching students about the ways in which various cultures have influenced the various vocations in this country. Disagreement arose from respondents to this statement. Twenty percent of teachers strongly disagreed, disagreed, or slightly disagreed with this statement. Increased emphasis on the contributions of various cultures to American society may make it important for business and marketing education teachers to gain knowledge of these other important influences.

14. I am uncomfortable around students whose ethnic heritage is different from my own. A majority of career-technical teachers responding to this survey seem to be comfortable in the presence of individuals from diverse backgrounds. A total of 82.2% disagreed with this statement at some level.

15. Students should give up their cultural beliefs and practices to fit in with other students. There was some slight agreement with this statement--9.5% of respondents agreed at some level. However, most respondents disagreed (90.5%). Business and marketing teachers agreeing with this statement may need to gain some awareness about sensitivity issues pertaining to cultural beliefs and practices.

16. Cultural diversity is a valuable resource and should be preserved. A majority (93.3%) of the business and marketing teachers responding agreed at some level to this statement. According to these teachers, cultural diversity should be preserved and recognized as a useful resource.

17. Vocational education activities should be representative of a wide variety of cultures. This statement generated varied responses, with a majority (85.5%) agreeing at some level. Respondents disagreeing equaled 13.7%. Business and marketing teachers may need some assistance developing instructional strategies that appeal to diverse cultures.

18. Cultural diversity is a negative force in the development of American society. While most respondents (89.5%) disagreed with this statement, it is interesting to note that 10.1% viewed cultural diversity as a negative force in our society. Continued increases in culturally-diverse student populations may require business and marketing education teachers to strive to recognize the positive impact that cultural diversity has had on American society.

19. All students should learn about cultural differences. Respondents believed it important for students to learn about cultural differences. A total of 95.3% of business and marketing education teachers (93.1%) responded positively to this statement.

Implications and Recommendations

This study sought to provide a descriptive analysis of the attitudes of business and marketing education teachers toward multicultural education. It sought to delve into a topic that has been in the forefront of educational discussions for the last 30 years. It was discovered that a majority of the business and marketing education teachers responding to the survey had positive attitudes about multicultural education and related issues. The study did uncover some areas where some improvement, additional education, and enhanced preparation will be justified if business and marketing education is to have an impact on the education of our children and our workforce during the twenty-first century. Contemplating the diversity that now encompasses our nation and schools,

business and marketing educators will need to equip their students with the resources and vitality essential to meeting the challenges incumbent of a multicultural society.

The findings of this study have important implications for teacher educators preparing future business and marketing teachers. There is a gap between how teacher education programs prepare preservice teacher about designing curriculum and instruction and the difficult and diverse "lived experiences" of learners (Breitborde, 1996). As Ladson-Billings (1991) noted, the challenge for teacher educators is not unlike the classroom teacher who "must meet the students where they are (*vis a vis* multicultural knowledge, skills, and attitudes) and help them to move to where they need to be" (p. 187). Taking students from where they are to where they need to be can be done in various ways. Examples for teacher educators include modeling the kind of attitudes and social interactions they want to see preservice teachers develop, finding ways to integrate preservice teachers into the communities and schools where they will teach, and preparing preservice teachers to learn from and about the communities where they will work (Ladson-Billings, 1991). "This a formidable but not insurmountable challenge. It requires a commitment to a society that is both democratic and multicultural and it requires us to look carefully at what knowledge, skills, and attitudes today's teachers will need to teach tomorrow's children" (Ladson-Billings, 1991, 194).

Business and marketing educators will need increased preparation in preservice and inservice programs if they are to develop and deliver curriculum and educational activities conscious of a variety of multicultural perspectives and populations. Cultural barriers will need to be expelled in business and marketing education if it is to have an impact on the educational and workforce structures of the future.

References

Banks, J. A. (1987). The social studies, ethnic diversity, and social change. Elementary School Journal, 87(5), 532-543.

Banks, J. A. (1993a). Multicultural education: Developments, dimensions, and challenges. Phi Delta Kappan, 75(1), 22-28.

Banks, J. A. (1993b). Multicultural education: characteristics and goals. In J. A. Banks & C. A. M. Banks (Eds.)., Multicultural education: Issues and perspectives (2n ed.) (pp.3-28). Boston: Allyn & Bacon.

Banks, J. A. (1995). Multicultural education and curriculum transformation. Journal of Negro Education, 64, 390-400.

Breitbords, M. (1996). Creating community in the classroom: Modeling new basic skills in teacher education. Journal of Teacher Education, 47, 367-374.

Butt, K., & Pahnos, M., (1995). Why we need a multicultural focus in our schools. Journal of Physical Education, Recreation and Dance,66, 48-53.

Ladson-Billings, G. (1991). Coping with Multicultural Illiteracy: A teacher education response. Social Education, 55, 186 – 194.

Latham, A. S. (1997). Responding to cultural learning styles. Educational Leadership, 54(7), 88-89.

Hodgkinson, H. (1989). The same client: The demographics of education and service delivery systems. Washington, DC: Institute for Educational Leadership.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30, 607-610.

Stanley, L. S. (1992). The development of an instrument to assess the attitudes toward cultural diversity and cultural pluralism among preservice physical education majors. Unpublished doctoral dissertation, University of Georgia, Athens.

Stanley, L. S. (1996). The development and validation of an instrument to assess attitudes toward cultural diversity and pluralism among preservice physical educators. Educational & Psychological Measurement, 56, 891-897.

National Center for Education Statistics (1995). Vocational education in the United States: The early 1990's (NCES 95-024). Washington DC: U.S. Department of Education, Office of Educational Research and Improvement.

Standards for the Accreditation of Teacher Education. (1977) Washington, D. C.: National Council for Accreditation of Teacher Education.

Advising Challenging in Cyberspace

Dr. Barbara Pevoto
Southwest Texas State University

Abstract

Providing students with an advising model geared to online instruction is needed at the university level. This shift provides student support services, which accommodate online instructional delivery.

A review of the literature indicates that one example of quality Internet student services is the shift libraries have made to provide online resources to students wherever and whenever needed (Chepesiuk, 1998). It has been suggested that traditional advising models do not address student access as needed; this problem is exasperated when considering the typical online student.

Recommendations include the issues of access, rapport, and efficiency. Access is no longer a limiting issue; universities now have infrastructures to offer advising services. Rapport can be addressed through chat rooms with advisers assigned specific times. E-mail allows students to reach advisors, while assuring confidentiality and integrity through authentication. Developing solutions to usual questions and placing this information on the web addresses the efficiency students seek.

Introduction

Internet-based classrooms have been cited as offering solutions to educational issues including over-crowed classrooms, the teacher shortage, and a means of providing access to education for populations in rural areas, and older adults working full time or raising a family (Perry, 2000). We know that on-line education has its roots in the 10th century rural correspondence courses offered by universities under the auspices of continuing education; subsequent technological advances allowed teachers to offer courses by radio and then television (Selingo, 1998). Further, according to Penn State's associate vice president for distance education, Gary Miller, "History shows that distance education has generally increased access to education."

Changes in delivery methods have also impacted the corporate training world. Learners were considered isolated in more traditional training settings; but according to Charles Jennings of Dow Jones Markets, the rapid developments of Internet technology allow the corporate training professionals to bring students face-t0-face at a distance in virtual classrooms. New technologies provide electronic learning environments where students can work with tutors, trainers, teachers and peers. Virtual classrooms offer collaborative experiences that mirror face-to-face contact of learning in classrooms.

There is much support and research to indicate that collaboration adds a vital element to the learning process. Research conducted at Queen's University, Belfast, found that collaborative learning based on computer conferencing technology supported in depth approaches to learning by encouraging critical evaluation and understanding through electronic discussions. The researchers found that face-to-face sessions encouraged more participation, but that computer conferencing generated more important statements, considered interaction and linked ideas. Learning outcomes were improved (Jenings, 1998).

Significance

The significance of Internet-based instruction does not stop with the issue of greater access. It challenges traditional models of college instruction. Course development, teaching/learning styles, quality control, academic integrity, accountability, accreditation, funding patterns controlled by legislation, tuition/fee payments and awarding of credit are issues related to delivering courses online that must be met head-on by our educational community. Providing the variety of student support services taken for granted on the college campus in a time efficient yet effective manner is paramount to the success of online instruction. This paper will focus on the effective delivery of one of these student support services—advising—which touches indirectly on tuition, award of credits and impacts funding issues.

Statement of Problem

The challenge of providing students with an advising model geared to online classroom instruction can be stated in the following question: How can the college/university offer the students selecting online courses as their preferred instructional delivery system the necessary advising services?

Theoretical/Conceptual Base and Related Literature

Many of the issues related to student support services, such as our topic of advising, can be directly linked to the concepts, which have been found to impact effective online courses. For example, a great deal of research has been conducted on classroom approaches and teaching styles best suited for distance learning/online courses. Distinguishing features that characterize effective teaching in the distance learning classroom have been investigated for the past decade. An additional issue has been the impact of the new interactive technologies on the teaching/learning process.

Research related to effective distance learning and communication. One such study conducted in North Carolina in 1995 focused on the distance learning network which involved the University of North Carolina-Wilmington, Cape Fear Community College, New Hanover High School and Hoggard High School in Wilmington. The researcher

examined the impact of the distance learning network on the human factors involved in communicating and learning. The research was qualitative in methodology and the results were based on observations, interviews with instructors and students, and participation in the task force meetings aimed at quality curriculum and training. The primary goal of the project was to promote interactive capability of the technology and to extend this style to the classroom. Collaboration was set as a priority, based on the theory stated earlier in this paper that collaboration adds a vital element to the learning process. Bailey and Cotlar (1994) espoused the value of collaborative learning environments in their description of internet teaching: "Students should not be viewed primarily as recipients of information, but as collaborators in the pursuit and creation of knowledge" (p. 193). The students and instructors indicated that what we already know and value about effective teaching was perceived to be effective in the distance learning classroom.

While this finding may not come as a surprise to the educator, there were other implications in the study of value as we address the problem of delivering effective advising services: if students are to learn to transcend the distance then their needs must be addressed by the designers of the technology. In other words, we already know a great deal about facilitating the teaching/learning process in more traditional settings. Further, we know the value of creating a comfortable environment in which students can explore complex and diverse ideas. Thus, technological designs must facilitate this interaction to help bridge the psychological distance (Comeaux, 1997). These study results can be easily extended/applied to an online advising service for our cyberspace students.

Additional characteristics of quality Internet services. We are aware that no physical location is necessary for the dissemination of course content; however, provisions for web-based conferencing and specialized "chat rooms" for specific discussions are needed. Additional features required in the distribution of content over the Internet are authentication, confidentiality and integrity. Authentication is necessary to establish and verify the identities of the provider and the receiver. Confidentiality is needed to protect the content and can be achieved through encryption and /or water marking. Encrypted em-mail can also be used for sensitive materials/content. Digital signatures ensure that the information transmitted electronically has not been tampered with (Chandersekaran, 1998).

Examples of Internet student support services. In the college/university setting, one outstanding example of quality, Internet student support services is the shift librarians have made to provide online resources to students wherever they are needed. For instance, the University of Maryland University College librarians pride themselves on their ability to deliver services online to students thousands of miles away through the web and a number of delivery systems, such as the library's distance-education software. The library maintains a virtual reference desk where students can "chat" with a librarian or leave a reference question online (Chepesiuk, 1998).

At Embry-Riddle Aeronautical University, Daytona Beach, Florida, the library has a section in the Compuserve Forum where students post messages; librarians provide

"handouts"; students and faculty can contact the library via e-mail for reference assistance, database searches, and document delivery (Chepesiuk, 1998).

These examples are not unlike services provided at Southwest Texas State University by the library services staff. At colleges and universities all over the country, the classroom is shifting away from what has been the traditional center of the educational universe. Students taking courses online in many universities can now access journal articles, books, database searches and reference librarians specializing in research services. "Our goal is to blur completely the line that now exists between the resources and services provided for our residential students and our online students, "stated Tim Robson, an administrator at Case Western Reserve University.

Recommendations for an Advising Model. It has been suggested that the more traditional advising models do not address the issue of student access when services are needed. This problem is exasperated when considering the typical online student. Access problems are no longer a limiting issue, as universities now have technological infrastructures to deliver this service, just as they are now offering course work. Further, in the instance of career counseling services, there are numerous software and CD-rom programs available to be included on the web site.

The issue of rapport between the individual student and advisor is a concern in the advising arena, just as it is in the more typical learning/teaching opportunity. The answer lies in alternative delivery methods of offering advising services; we must consider a virtual setting for an advising service. Access to the web is becoming universal; schools need to take advantage of this lengthening of the usual instructional day (Springer, 1999).

Characteristics already mentioned as necessary for a quality, collaborative course offering, equally apply to on-line advising services; these include establishing chat rooms with advisors assigned at specific times of the day or night (Springer, 1999), using e-mail addresses for students to contact advisors, assuring authentication, confidentiality and integrity. As has been suggested for use to protect course content, encrypted e-mail could be used for more sensitive information in our advising model.

One final recommendation is to develop "usual" solutions to "usual" questions and put this information on the web for student use. For instance, sample degree plans could be displayed on the web site for students to consider. This suggestion is similar to a suggestion offered by Dean Loflin, of the liberal arts college at the University of Colorado, Denver in connection with what he calls "capitalizing on the power of computers to let professors have more time teaching" (Guernsey, 1998). Computers, he says, might generate automatic answers to students' most common questions, so that professors don't have to write the same e-mail messages every semester. This same idea applies to redundant advising functions/duties.

Summary/Recommendations

In summary, there are similar issues related to teaching courses on the Internet and offering student support services on the Internet. These issues include access, teaching/learning process, quality indicators or characteristics, elimination of duplicative information, creating a comfortable environment, and technological design that enhances the delivery of the content and/or service.

One final recommendation or caution is that this suggested advising model is intended for routine college/university advisement and career counseling/advising. On-line services for personal counseling of students is not being recommended. Further, the requisite skills for personal counseling have not been included in this chapter.

In predicting or projecting the future of cyberspace applications in the university setting, the following quote by J. W. Hall seems appropriate:

> Students in the university of convergence will learn to engage with information, understand how to use it, and gain the skills and intellectual competencies associated with a university graduate. The faculties of the university of convergence will also take on aspects of the teaching role that have heretofore been less prominent or essential. The role of intellectual guide to the student, or mentor, will become more important as students pursue much of the formal instruction, formerly communicated through faculty lectures, in a variety of self-paced, student-directed modes. In fact, student planning and academic advisement are likely to move the very center of the educational process for both students and faculty as both seek to find and use the most useful available resources. The traditional university never gave this critical function more than lip service. Most faculty time was committed to direct instruction and research with little time reserved for direct engagement with individual students. The university of convergence will require a dramatic shift of time commitment toward student advisement. So, although technology offers solutions to the problems and limitations of distance education institutions, technology will also allow the traditional university to address its limitations as well. With technology, the university of convergence will be able to overcome the historic problems that made distance education necessary in the first place (Hall, 1995).

References

Bailey, E. K., & Cotlar, M. (1994). Teaching via the Internet. Communication Education, 43, 1 & 193.

Chandersekaran, Achamma C. (1998). Education and training transformed by internet-enabled electronic commerce. Business America, 119, 1, 31.

Chepesiuk, Ron. (1998). Internet college: The virtual classroom challenge. American Libraries, 29, 3, 52.

Comeaux, Patricia. (1995). The impact of an interactive distance learning network on classroom communication. Communication Education, 44, 353.

Guernsey, Lisa. (1998). Distance education for the not-so-distant. The Chronicle f Higher Education, 64, 29, A29.

Hall, J. W. (1995). The revolution in electronic technology and the modern university: the convergence of means. Educom Review, 30, no. 4.

Jennings, Charles. (1997). So far, yet so near. People Management, 3, 18, 42.

Perry, Rick. (2000). Online universities opening new doors. The Austin American Statesman, Comment.

Selingo, Jeffrey. (1998). Small, private colleges brace for competition from distance learning. The Chronicle of Higher Education, 44, 34, A33.

Springer, Steve. (1999). Alternative advising models. A power point presentation.

The Effect of Different Methods of Forming Groups on Student Performance In a Business Communication Course

Michael L. McDonald, Ph.D.
The University of Southern Mississippi

Cheryl D. Wiedmaier, Ph.D.
University of South Carolina

Abstract

This experiment was conducted to compare two instructional methods of formulating groups for cooperative learning projects in a business communications class. The study examined which of the two methods promoted higher student performance relative to report writing content knowledge and skill ability. In addition, the effect on students' perceptions of the unit when the two methods were used also was examined in this experiment.

Data for the study was obtained from 39 students enrolled in two intact sections of an undergraduate business communications course at the University of South Carolina during the 2000 Fall Semester.

Analysis resulted in no statistically significant difference in student performance relative to content knowledge of report writing and skill ability in report writing when groups were formulated by the student participants or groups that were formulated by the instructor based on differences in participants' declared majors. Further, analysis resulted in no statistically significant difference in relative to students perceptions' of the unit when groups were formulated by the student participants or groups that were formulated by the instructor based on differences in participants declared majors.

Introduction

Team, group, cooperative learning team, work team, work group, cross-functional team, and self-directed team have become common jargon in the world of business. More importantly, the ability to work in teams has become a basic and very desirable skill for employees. "A team-oriented approach is replacing the traditional top-down management style in today's organizations" (Lehman and DuFrene, 1998, p. 33). Since businesses are relying more on teams, business and business education programs have incorporated teamwork into their instruction.

Problem

As business and business education programs incorporate teamwork into their instruction, the methods used by instructors to implement group work should be studied. "Teacher educators should provide leadership in conducting and applying research which assumes that instruction is based on valid information, new concepts, and technological

advances" (Policies Commission for Business and Economic Education, 1993). Business communications classes often offer instruction and practice to students learning to work in groups. The problem this study investigates is "how should teams or cooperative learning groups of students be formulated?"

Purpose

This study is designed to assist business communications instructors in identifying whether the instructor placing students in groups is an effective method of forming groups concerning student performance on unit tests and skill performance in a business communications course. The specific research questions to be addressed are:

(1) Is there a significant difference in the unit test performance between students who were placed in groups by their instructor and the unit test performance by students who chose their own group partners for a short report unit in a business communications course?

(2) Is there a significant difference in the skill assignment performance between students who were placed in groups by their instructor and the skill assignment performance by students who chose their own group partners for a short report unit in a business communications course?

(3) Is there a significant difference in the perceptions of the unit between students who were placed in groups by their instructor and the perceptions of students who chose their own group partners for a short report unit in a business communications course?

Related Literature

According to Guffey (2000), "Many organizations [businesses] develop teams to compete globally, meet higher standards, and increase profits" (p. 37). The authors suggested that teams improve communication within an organization and do work that individuals cannot accomplish. Further, employees functioning in successful groups have a higher degree of job satisfaction, take more pride in their jobs, and have a higher self-esteem.

The importance of group or team work was reflected in the U.S. Department of Labor report (1992) which is often referred to as the SCANS report This report states that a necessary workplace competency is the interpersonal skill of working as a team member or "Participates as a member of a team--works cooperatively with others and contributes to group efforts with ideas, suggestions, and effort" (p. 81). This report further contends that additional necessary interpersonal skills are the ability to exercise leadership, to negotiate arrival at a decision, and to work with cultural diversity.

Another U.S. Department of Labor report that suggested that group work skills are very important is the Workplace Basics report by Carnevale, Gainer, & Meltzer (1990). According to the authors of this report,

> Whenever people work together, successful interaction depends upon effective interpersonal skills, focused negotiation, and a sense of group purpose (teamwork).
> . . . All this puts a premium on developing employees' group effectiveness skills.
> . . .This is particularly relevant to working teams. Teamwork skills are critical for improving individual task accomplishment at work because practical innovations and solutions are reached sooner through cooperative behavior. (pp. 31-32)

Carnevale, Gainer, & Meltzer (1990) reported the need for training employees to be effective group participants. Their report suggests that the effective use of groups results in higher productivity and product quality.

A review of the literature revealed no empirical research has been conducted and published that focused on effective practices for composing groups in the business communications classroom. The majority of the literature emphasized two areas: (1) the advantages and disadvantages of using groups, and (2) suggestions for implementing effective group activities into the learning environment.

King, Tayler, and Maloney (1991) defined small group cooperative learning as "a classroom environment where students interact with one another in small groups while working together on academic tasks to attain a common goal (Parker, 1984; Johnson & Johnson, 1986)." According to the authors, small group cooperative learning has educational and social advantages. King, Tayler, and Maloney (1991) suggest that students will benefit in the areas of academic achievement, social relationships, self-esteem, cross cultural/cross racial relationships and attitudes about education. King, Tayler, and Maloney (1991) list the following advantages to small group cooperative learning:

- Students become actively involved in their own learning and therefore have control over it;
- interaction increases group communication skills;
- working together towards a common goal leads to significant gains in academic achievement, self confidence as a learner and social relationships; and
- cooperative learning leads to the enhancement of higher order thinking skills.

King, Tayler, and Maloney (1991) report several negative elements to small group cooperative learning:

- Students often want to work independently and therefore teachers have to select and design tasks which encourage group interaction;
- some students are passive and therefore are not necessarily involved in cooperative interplay; and
- not all students have the communication skills necessary for successful interaction.

According to Stahl (1994), cooperative learning has become the leading approach to instruction.

> One important reason for its advocacy is that . . . students completing cooperative learning group tasks tend to have higher academic test scores, higher self-esteem, greater numbers of positive social skills, fewer stereotypes of individuals of other races or ethnic groups, and greater comprehension of the content and skills they are studying (Johnson, Johnson, and Holubec 1993; Slavin 1991; Stahl and VanSickle 1992)." (Stahl, 1994)

Stahl (1994) suggests that group members should be mixed as heterogeneously as possible according to academic abilities, ethnic backgrounds, race, and gender (in that order). The author reports that groups should never be allowed to form on the basis of friendship or cliques. "When groups are maximally heterogeneous and the other essential elements are met, students tend to interact and achieve in ways and at levels that are rarely found in other instructional strategies" (Stahl, 1994).

Stahl (1994) offers several suggestions for positive group experiences. Some of Stahl's suggestions listed were that steps should be taken to keep students from feeling penalized academically by being placed in a particular group. Further, "Teachers must structure learning task so that students come to believe that they sink or swim together—that is, their access to rewards is as a member of an academic team wherein all members receive a reward or no member does" (Stahl, 1994).

> Stephen Balcom defined cooperative leaning as,
> . . . a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Each member of a team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement. (1992)

Balcom (1992) reported that cooperative learning results in improved academics achievement, improved behavior and attendance, increase self-confidence and motivation, and increased liking of school and classmates. Balcom (1992) reports that the effectiveness of cooperative leaning has been demonstrated by more than 70 major studies by federally sponsored research centers, field-initiated investigations, and local districts. According to Balcom (1992), when group goals and individual accountability are used together, the effects on achievement are consistently positive.

An article by Hunt and Burford (1994) discusses the benefits of using Group Support Systems (GSS) technology to promote group work interactions. According to the authors,

> Since knowledge is doubling ever three to five years, and with more technology to deliver information, no educational system can hope to give students all of the knowledge they need. Education's most important goal, then, may well be the development of positive attitudes toward learning. Opportunities for group interaction are ways for learners to formulate ideas and to make choices which are informational, challenging, and rewarding. (Hunt & Burford, 1994, p. 31)

Hunt and Burford (1994) contend that the use of GSS can promote the use of group processes as an instructional methodology and that group processes promote 1 following values:

- Groups generally have more information than one individual.
- Groups are better than one individual at detecting errors in proposed ideas.
- Members may learn from and imitate the most skilled member of the group. (p. 31)

Hunt and Burford (1994) further report that GSS may eliminate many of the negative elements associated with group work. The negative elements mentioned were conformance pressure, socializing, forgetting responses of others, lacking focus on issues involved, slow feedback, and free rides for loafers.

Methodology

The research study utilized a quasi-experimental design. Two groups (intact classes) were studied and designated as Treatment Groups A and B. In Treatment Group A, groups were formulated by selecting their own team members. The instructor set up no criterion. In Treatment Group B, their instructor placed students in groups. The criteria for the groups were based on student's majors. Each member of a group had a different declared major.

Treatment Groups A and B used the same course materials. Both groups completed the same textbook readings and skills development assignments. A perceptions questionnaire was administered at the end of the treatment. The instrument used to measure students' perceptions of the unit was taken from a research study by LaBonty (1989). The questionnaire contained six questions; each question consisted of a five-point Likert-type scale response. LaBonty reported the reliability for this instrument at .76. Statistical analysis was applied to analyze the data.

Two sets of variables were identified in the study. The independent variables were (a) student selected groups, and (b) instructor selected groups. The dependent variables were (a) student achievement in content knowledge, (b) student performance in skill achievement, and, (c) student perceptions of the unit.

The two treatments were randomly assigned and conducted during the 2000 Fall semester at the collegiate level with two intact sections of a business communications course. The same business communications instructor taught the two sections.

Findings

The population of the study consisted of 39 students enrolled in two intact sections of an undergraduate business communications course at the University of South Carolina. To determine if a significant difference existed concerning the content level achieved between Treatment Group A--formulated by selecting their own team members, and Treatment Group B--instructor formulated groups, a single factor analysis of variance or ANOVA was applied to the groups unit test scores and tested at the .05 confidence level. The independent variables were the two treatment methods. The dependent variable was the student mean scores on the unit tests. Two experienced university business communications instructors established content validity. The test used was designed to measure student achievement in report writing content knowledge.

Descriptive statistics consisting of means and standard deviations of the unit test scores between Treatment Groups A and B are presented in Table 1. Table 2 presents the results of the single factor analysis of variance (ANOVA) for the treatment groups on content achievement. The analysis resulted in no statistically significant difference for groups that were formulated by the students and groups that were formulated by the instructor.

Table 1
Report Writing Content Achievement: Means and Standard Deviations

Groups	n	Sum	Mean	Standard Deviation
Treatment Group A	27	1976	73.185	79.695
Treatment Group B	27	1946	72.074	112.533

Table 2
Analysis of Variance for Treatment Groups on Content Achievement

Source of Variation	SS	df	MS	F	p
Between Groups	16.667	1	16.667	0.173	0.679
Within Groups	4997.926	52	96.114		
Total	5014.593	53			

To determine if a significant difference existed concerning the skill level achieved between Treatment Group A--formulated by selecting their own team members, and Treatment Group B--instructor formulated groups, a sir gle factor analysis of variance or ANOVA was applied to the groups report writing exercise scores. The independent variables were the two treatment methods. The dependent variable was the student mean scores on the report writing exercise. A rubric was used in evaluating the exercises. Two experienced university business communications instructors established content validity

for the rubric. The exercise used was designed to measure student achievement in report writing skill ability.

Descriptive statistics consisting of means and standard deviations of the report writing exercise scores between Treatment Groups A and B are presented in Table 3. Table 4 presents the results of the single factor analysis of variance (ANOVA) for the treatment groups on skill level achievement. The analysis resulted in no statistically significant difference for groups that were formulated by the students and groups that were formulated by the instructor.

Table 3
Report Writing Skill Achievement: Means and Standard Deviations

Groups	n	Sum	Mean	Standard Deviation
Treatment Group A	27	1893	70.111	85.872
Treatment Group B	27	1828	67.704	47.755

Table 4
Analysis of Variance for Treatment Groups on Skill Achievement

Source of Variation	SS	df	MS	F	p
Between Groups	78.241	1	78.241	1.171	0.284
Within Groups	3474.296	52	66.813		
Total	3552.537	53			

To determine if a significant difference existed concerning the perceptions of the unit between Treatment Group A--formulated by selecting their own team members, and Treatment Group B--instructor formulated groups, a perceptions questionnaire was administered to the participants and a single factor analysis of variance or ANOVA was applied to their responses. The independent variables were the two treatment methods. The dependent variable was the student mean scores on the perceptions questionnaire.

Descriptive statistics consisting of means and standard deviations of the unit perceptions between Treatment Groups A and B are presented in Table 5. Table 6 presents the results of the single factor analysis of variance (ANOVA) for the treatment groups on the unit perceptions. The analysis resulted in no statistically significant difference for groups that were formulated by the students and groups that were formulated by the instructor.

Table 5
Unit Perceptions: Means and Standard Deviations

Groups	n	Sum	Mean	Standard Deviation
Treatment Group A	21	344	16.381	10.048
Treatment Group B	21	338	16.095	9.590

Table 6
Analysis of Variance for Treatment Groups on Students' Perceptions of the Unit

Source of Variation	SS	df	MS	F	p
Between Groups	0.857	1	0.857	0.087	0.769
Within Groups	392.762	40	9.819		
Total	393.620	41			

Summary

This experiment was conducted to compare two instructional methods of formulating groups for cooperative learning projects in a business communications class. The study examined which of the two methods promoted higher student performance relative to report writing content knowledge and skill ability. In addition, the effect on students' perceptions of the unit when the two methods were used also was examined in this experiment.

Data for the study was obtained from 39 students enrolled in two intact sections of an undergraduate business communications courses at the University of South Carolina. The same business education instructor taught both sections during the 2000 Fall Semester.

Analysis resulted in no statistically significant difference in student performance relative to content knowledge of report writing when groups were formulated by the student participants or groups that were formulated by the instructor based on differences in participants' declared majors. Analysis resulted in no statistically significant difference in student performance relative to skill ability in report writing when groups were formulated by the student participants or groups that were formulated by the instructor based on differences in participants declared majors. Further, analysis resulted in no statistically significant difference in relative to students perceptions' of the unit when groups were formulated by the student participants or groups that were formulated by the instructor based on differences in participants declared majors.

Conclusions

Assuming the data collected is reliable, valid, and representative of collegiate students, the following conclusions are drawn:

1. Both student formulated groups and instructor formulated groups produce similar student performance results relative to content knowledge of report writing. The analysis of variance test resulted in no significant difference between the two groups of students.
2. Both student formulated groups and instructor formulated groups produce similar student performance results relative to skill ability in report writing. The analysis of variance test resulted in no significant difference between the two groups of students.
3. Both student formulated groups and instructor formulated groups produce similar perceptions of the unit. The analysis of variance test resulted in no significant difference between the two groups of students.

References

Balcom, Stephen, (1992). Cooperative learning. Education Research CONSUMER GUIDE. (Office of Educational Research and Improvement of the U.S. Department of Education Publication No. OR 92-3054). Retrieved October 8, 2000 on the World Wide Web: http://www.ed.gov/pubs/OR/ConsumerGuides/cooplear.html.

Carnevale, A. P., Gainer, L. J., & Meltzer, A. S. (1990). Workplace basics: The essential skills employers want. San Francisco, CA: Jossey-Bass Publishers.

Guffey, M. E. (2000). Business communications process & product (3rd ed.). Cincinnati: South-Western College Publishing.

Hunt, C. S., & Burford, A. M. (February, 1994). Group support systems. Business Education Forum. No. 48.

King, L., Tayler, C., & Maloney, C. (1991). Small group cooperative learning: Developing a category system. Educational Research Vol. 1. Retrieved October 8, 2000 on the World Wide Web: http://www.cleo.murdoch.edu.au/gen/iier/iier1/91p7.htm

LaBonty, D. J. (1989). Computer-assisted homework in accounting: Effects on student achievement and attitude. Delta Pi Epsilon Journal, 31 (2), 47-55.

Lehman, C. M. (1998). Business communications (12th ed.). Cincinnati: South-Western College Publishing.

Policies Commission for Business and Economic Education. (1993). This we believe about the role of business education in technology. (Statement 53). South-Western Publishing Co.

Stahl, Robert J. (1994). The essential elements of cooperative learning in the classroom. ERIC Digest (ED370881). Retrieved on October 8, 2000 on the World Wide Web: http://www.ed.gov/databases/ERIC_Digests/ed.370881.html

C4